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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

AFREMOVA, VERA

ART UNIT	PAPER NUMBER
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1651

DATE MAILED: 04 22 2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/604,082

Applicant s.

Bessette et al.

Examiner

Vera Afremova

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 11, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5, 7, 8, and 10-45 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7, 8, and 10-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s)
- 18) ☐ Interview Summary (PTO-413) Paper No(s)
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other

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DETAILED ACTION

Claims 1, 3-5, 7, 8, 10 and 11 as amended and new claims 12-45 are pending and under examination [Paper No. 8 filed 2/11/2002].

Claims 2, 6 and 9 were canceled by applicants in the Paper No. 8 filed 2/11/2002.

Claim Rejections - 35 USC § 112

Claims 5, 7, 8, 10 and 11 as amended remain rejected under 35 U.S.C. 112, *second paragraph*, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 is indefinite because it is confusing and uncertain as claimed whether rosemary oil is an active/major component or whether rosemary oil is one component selected from the group of acceptable carriers (see line 4). The claim is also rendered indefinite by the phrase "with piperonyl butoxide, or sesame oil and/or soybean oil" at the end of this claim because it is uncertain as presently claimed whether these claimed components are within the claimed group of essential oils or whether they are additional components of the whole pesticidal composition. Claim 5 contains improper Markush groups also in the recitation of "the group consisting of" followed by "with" and "and/or". Thus, the "pesticidally-effective amount(s)" of claim 7 cannot be determined.

Claim 8 is indefinite and contains improper Markush group in the recitation of "the group consisting of eugenol, phenetyl propionate, peppermint oil and benzyl alcohol," followed by

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"and one or more conventional pesticides" wherein it is uncertain whether the pesticide is an essential oil as claimed.

Claim 24 is rendered indefinite by the phrase "isopar M" which appears to be a trademark. First, trademark name should be capitalized wherever it appears. Further, claim is indefinite and confusing in the lack of definitions in the specification or accompanied generic terminology for this compound as intended. Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 4, 8, 10 and 11 as amended remain rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/30124 [IDS-3] as explained in the prior office action and for the reasons below.

Claims are directed to a repellent pesticidal composition for controlling household pests including cockroaches and ants wherein the composition comprises rosemary oil and acceptable carrier. Some claims are directed to a repellent composition for controlling household pests including cockroaches and ants comprising rosemary oil, carrier and conventional pesticide such as pyrethrum. Some claims are further drawn to method for controlling household pests including

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cockroaches and ants by applying the repellent composition to a location where control is desired. Some claims are further drawn to the use of acceptable carrier such as isoparaffinic hydrocarbons in the composition. An additional plant essential oil component is optional in the compositions as claimed.

WO 98/30124 [IDS-3] is relied upon as explained in the prior office action and repeated herein.

WO 98/30124 [IDS-3] discloses a repellent composition for controlling household pests such as parasitic fleas (page 2, lines 2-5) comprising rosemary oil, additional plant essential oils, isoparaffinic hydrocarbon carrier such as wax and conventional pesticide such as pyrethrum . For example: see page 2, lines 20-32 and page 3, lines 1-4.

The disclosed composition clearly anticipates the claimed composition because additional plant essential oil is an optional component and, thus, it is not required by the presently claimed invention. However, with regard to the additional plant essential oil compounds which are intended such as eugenol or benzyl alcohol, for example, it is noted that eugenol and benzyl alcohol are present in many natural sources including various plants or various plant oils.

The cited patent WO 98/30124 [IDS-3] also teaches the method for controlling undesirable household pests by applying the repellent composition to a location where household pest control is desired (page 2, line 5-8). Although the present invention appears to be intended for controlling cockroaches and ants, the cited method is considered to anticipate the presently claimed method because it is a one active step method which comprises the identical active step

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of applying identical composition with identical components to some unspecified location where pest control is desired. Thus, application of identical composition is reasonably expected to produce substantially similar, if not identical, effects related to control of insects or household pests as intended by the presently claimed invention.

Claims 1, 3-5, 7, 8, 10 and 11 as amended remain rejected under 35 U.S.C. 102(b) as being anticipated by WO 95/07024 [N] as explained in the prior office action and for the reasons below.

Claims are directed to a repellent pesticidal composition for controlling household pests including cockroaches and ants wherein the composition comprises rosemary oil, acceptable carrier and optionally an additional plant essential oil. Some claims are directed to a repellent pesticidal composition for controlling household pests including cockroaches and ants comprising rosemary oil, carrier and conventional pesticide wherein pesticide is pyrethrum (claim 8) or piperonyl butoxide (claim 6). Some claims are further drawn to method for controlling household pests including cockroaches and ants by applying the repellent composition to a location where control is desired. Some claims are further drawn to the use of acceptable carrier such as isoparaffinic hydrocarbons in the composition. An additional plant essential oil component and/or sesame oil and/or soybean oil are optional components as claimed.

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WO 95/07024 [N] discloses a repellent composition for controlling household pests comprising rosemary oil, carrier and conventional pesticide such as pyrethrum and/or piperonyl butoxide (page 5, lines 13-22). The cited patent also teaches a method for controlling household pests by applying the repellent composition to a location or surface where household pest control is desired (page 4, lines 12-15). The disclosed composition anticipates the claimed composition because additional plant essential oil or sesame oil or soybean oil are optional components and, thus, they are not required by the presently claimed invention. Further, application of identical composition is reasonably expected to produce substantially similar, if not identical, effects related to control of all household pests as intended by the presently claimed invention. Thus, the presently claimed invention remains to be anticipated by the cited reference.

Claim rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-5, 7, 8, 10 and 11 as amended remain rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/30124 [IDS-3] taken with WO 95/07024 [N] , US 4,759,930 [IDS-1] and Merck Index [U] as explained in the prior office action and for the reasons below.

Claims are directed to a repellent pesticidal composition for controlling household pests including cockroaches and ants wherein the composition comprises rosemary oil, acceptable carrier and, optionally, an additional essential oil. Some claims are directed to a repellent

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composition for controlling household pests including cockroaches and ants comprising rosemary oil, acceptable carrier, conventional pesticide such as pyrethrum or piperonyl butoxide and, optionally, an additional plant oil or plant oil compounds such as peppermint oil, sesame oil, eugenol or benzyl alcohol. Some claims are further drawn to method for controlling household pests including cockroaches and ants by applying the repellent composition to a location where control is desired.

WO 98/30124 [IDS-3] and WO 95/07024 [N] are/were relied upon as explained above and as explained in the prior office action for the disclosure of pest repellent compositions comprising rosemary oil, acceptable carrier, pesticides as well as some additional plant essential oils. The cited patents are also relied upon for the teachings of methods for controlling household pests or insects with the disclosed compositions. In addition, the cited patents also teach incorporation of various plant essential oils together with rosemary oil into pesticidal composition (see abstract of WO 98/30124) or the use of vegetable oil such as sesame oil (see WO 95/07024 [N] at page 5, line 7, for example) in the pesticidal compositions and method for controlling household pests.

Further, the disclosure by Merck is/was relied upon to demonstrate that piperonyl butoxide is a known insecticide or pesticide synergist (item 7629 at page 7726) and that plant essential oils such as, for example: eugenol (item 3944 at page 661) or benzyl alcohol (item 1159 at page 1162) are obtained from many natural sources including various plants in particular.

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The cited WO 98/30124 [IDS-3] and WO 95/07024 [N] are silent with regard to cockroaches as household pests intended for extermination in the method for controlling household pests.

However, US 4,759,930 [IDS-1] is/was relied upon for the teaching that compositions comprising materials obtained from various plants, such as rosemary, in particular, as well as peppermint, are effective in method for killing cockroaches.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to use the pesticidal compositions with rosemary oil and other plant essential oils in a method for controlling pests such as cockroaches with a reasonable expectation in success in controlling and/or killing cockroaches because it is known that rosemary oil and other plant essential oils and/or vegetable oils are effective for pest control and management as taught by WO 98/30124 [IDS-3] and WO 95/07024 [N] and that components of rosemary plant in particular are effective for cockroach extermination and killing as taught by US 4,759,930 [IDS-1]. There is a clear motivation for one of ordinary skill to use natural materials to exterminate pests in the house and garden for the benefit of minimizing the use of chemicals having side effects. Thus, the claimed invention as a whole was clearly *prima facie* obvious, especially in the absence of evidence to the contrary. The incorporation of conventional solvents or carriers is considered to be within the purview of the ordinary skill practitioner in the field of insect control or extermination. The claimed subject matter fails to patentably distinguish over

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the state art as represented by the cited references. Therefore, the claims are properly rejected under 35 USC § 103.

Claims 1, 3-5, 7, 8, 10 and 11 as amended and new claims 12-45 remain/are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/30124 [IDS-3] taken with WO 95/07024 [N], US 4,759,930 [IDS-1] and Merck Index [U] as applied to claims 1, 3-5, 7, 8, 10 and 11 above, and further in view of US 6,232,865 [B], US 6,230,435 [E], JP 3-127702 [N], US 5,849,317 [C], US 5,688,509 [D], JP 1-130415 [O], US 5,013, 769 [I], US 3,761,584 [F], US 5,800,897 [G] and US 5,246,919 [H].

Claims 1, 3-5, 7, 8, 10 and 11 as explained above. New claims 12-45 are/are further drawn to pesticidal compositions and methods for controlling household pests including cockroaches and ants with the pesticidal compositions wherein the compositions comprise various combinations of rosemary oil with other plant oils or plant oil compounds and carriers such as soybean oil, phenethyl propionate, methyl salicylate, menthyl isovalerate and Isopar M.

The cited references WO 98/30124 [IDS-3], WO 95/07024 [N], US 4,759,930 [IDS-1] and Merck Index [U] are relied upon as explained above for the disclosure of pesticidal composition and methods for controlling household pests with the pesticidal compositions comprising rosemary oil, carrier and other plant derived oils and compounds such as sesame oil, peppermint, pyrethrum, piperonyl butoxide, eugenol and benzyl alcohol. The cited references are missing particular disclosure of additional components in the pesticidal compositions and

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methods for controlling household pests including cockroaches and ants such as soybean oil, phenethyl propionate, methyl salicylate, menthyl isovalerate and as isopar M.

The cited patent US 6,232,865 [B] teaches plant essential oils including rosemary oil, sesame oil and soybean oils as natural pesticides for controlling various pests including household pests (see abstract) such as flies or spiders (examples at col. 6). US 6,230,435 [E] demonstrates that pest control compositions with soybean oil are effective against pests such as ants, for example: col. 8, lines 18-27).

JP 3-127702 [N] teaches an effective and continuous control of pests including cockroaches by using a cockroach repellent composition comprising essential oils and salicylic acid as main components (abstract). US 5,849,317 [C] is relied upon for the disclosure of methyl salicylate as a component of pesticidal compositions intended for insect management including control of ants, for example: see col. 3, line 8. The cited patent teaches that insect management compositions and methods comprise the use of both insect attractants and insect repellents and that the attractants are typically employed in combination with insecticides or agents effective in killing undesirable insects (col. 2, lines 55-67 and col. 3, lines 37-38). Further, US 5,688,509 [D] is relied upon for the disclosure of methyl salicylate as an active component in combination with various plant essential oils (col. 3, lines 28-32) in compositions/methods intended for controlling various pests including mites, moths, beetles, flies, etc. (col. 5, lines 9-18). In addition, JP 1-130415 [O] further teaches the use of various salicylic acid derivatives in ant-protective products

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(abstract). Further, US 5,013, 769 [I] discloses the use of menthyl salicylate in the insect repellent composition (col. 10, lines 33-43).

US 3,761,584 [F] is relied upon for the disclosure of phenethyl propionate in formulations with eugenol in compositions methods for insect managements (see abstract). The cited patent further teaches addition of insecticide to the formulations comprising phenethyl propionate and eugenol (col. 3, line 15).

US 5,800,897 [G] is relied upon for the disclosure of menthyl isovalerate in the household compositions (col. 15, line 41).

US 5,246,919 [H] is relied upon for the disclosure of Isopar M (col. 8, line 42) as an acceptable carrier for natural essential oils (col.8, line 20) which enhances strength and time of essential oil action (col. 8, line 35) in the household compositions including insect repellent compositions (col. 12, line 34).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to use the insecticidal compositions with various combinations of rosemary oil with other plant derived oils and compounds intended for controlling various household pests or insects with a reasonable expectation in success in controlling various household pests or insects including cockroaches and ants because all compounds which are presently claimed have been shown in the insect management compositions comprising plant essential oils as effective in controlling a large variety of household pests or insects including ants and cockroaches. It is well known that it is prima facie obvious to combine two or more

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ingredients each of which is taught by the prior art to be useful for the same purpose in order to form a third composition which is useful for the same purpose. The idea for combining them flows logically from their having been used individually in the prior art. In re Pinten, 459 F.2d 1053, 173 USPQ 801 (CCPA 1972); In re Susi, 58 CCPA 1074, 1079-80; 440 F.2d 442, 445; 169 USPQ 423, 426 (1971); In re Crockett, 47 CCPA 1018, 1020-21; 279 F.2d 274, 276-277; 126 USPQ 186, 188 (1960). Thus, the claimed subject matter fails to patentably distinguish over the state art as represented by the cited references combined. The claimed invention as a whole was clearly *prima facie* obvious, especially in the absence of evidence to the contrary. Therefore, the claims are properly rejected under 35 USC § 103.

Response to Arguments

Applicant's arguments filed 2/11/2002 have been fully considered but they are not persuasive for the reasons below.

With regard to the claim rejection under 35 U.S.C. 102(b) applicants appears to argue that the doctrine of inherency is totally misplaced in the office action (see response page 11) because the cited patents WO 98/30124 [IDS-3] or WO 95/07024 [N] do not provide a disclosure related to control of cockroaches as intended by the claimed invention but rather the cited references discloses control of other exemplified insects such as lice, for example, by applying pesticidal compositions with rosemary oil as a major compound. This argument is not found convincing since in order to qualify as an anticipatory reference, the disclosure need not be express. Even

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failure of those skilled in the art to contemporaneously recognize an inherent property, function or ingredient of a prior art reference does not preclude a finding of anticipation: In *Atlas Powder Co. v. IRECO, Inc.*, 51 USPQ2d 1943 (Fed. Cir. 1999). Thus applicants are incorrect in arguing that the anticipatory rejection is improper and must be "certain".

Applicants arguments lack merit, because the intended use of the composition and the methods claimed are for "the control of household pests, including cockroaches and ants", which recitation suggests that applicants intended "cockroaches and ants" merely as an example of household pests rather than to limit the composition and the process to the control of household pests. Even though the reference does not teach that the composition can be used for the control of cockroaches and ants specifically, the intended use of the composition does not distinguish the composition, since such undisclosed use is inherent in the reference composition. In order to be limiting, the intended use must create a structural difference between the claimed and the prior art composition. In the instant case, the intended use does not create a structural difference, thus, the intended use is not limiting. "The claiming of a new use . . . which is inherently present in the prior art does not necessarily make the claim patentable." *In re Best*, 195 USPQ 430, 433 (CCPA 1977). When applicant claims a "composition in terms of function . . . and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the Examiner may make a rejection under both. Moreover, the claimed method does not require to contact living cockroaches or ants with the claimed compositions but rather to apply a composition to a location where pest control is desired.

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The claimed invention encompasses cockroaches and ants as some examples of pests within the whole range of household pests by the virtue of the phrase "pests including". However, under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates. See *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). In the instant case the cited references teach the use of pesticidal compositions comprising rosemary oil in methods which are effective for controlling household insects. Inherency is not necessarily coterminous with the knowledge of those of ordinary skill in the art. See *Titanium Metals*, 778 F.2d at 780. Artisans of ordinary skill may not recognize the inherent characteristics or functioning of the prior art. See *id.* at 782. However, the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. See *id.* at 782 ("Congress has not seen fit to permit the patenting of an old [composition], known to others . . . , by one who has discovered its . . . useful properties."); *Verdegaal Bros.*, 814 F.2d at 633.

With regard to the claim rejection under 35 U.S.C. 103(a) applicants argue that there is no suggestion to combine the cited references (see response page 15, last par.). However the cited references are in the same field of endeavor of insect management and control, and they seek to solve the same problems as the instant application and claims such as controlling various household pests or insects including cockroaches [US 4,759,930]. Thus, one of skill in the art is free to select components available in the prior art with reasonable expectation of success. In re

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Winslow, 151 USPQ 48 (CCPA, 1966). It is also noted that some of the applicants' arguments related to the use of the same compound as carrier or inert ingredient and as essential oil component or active ingredient (see response page 8, par. 2) is not well taken because the differences between active and inert components in the claimed composition are usually considered as critical. The lack of clear distinction between ingredients renders the present invention confusing as claimed and as argued. Moreover, the incorporation of additional ingredients into pesticidal compositions in the present invention fails to indicate the specific amounts which in combination might produce "synergistic" effects, if any, towards control or management of any and all household pests. This rejection is based on the well established proposition of patent law that no invention resides in combining old ingredients of known properties where the results obtained thereby are no more than the additive effect of the ingredients, *In re Sussman*, 1943 C.D. 518. Applicants invention is predicated on an unexpected result, which typically involves synergism, an unpredictable phenomenon, highly dependent upon specific proportions and/or amounts of particular ingredients. Any mixture of the components embraced by the claims which does not exhibit an unexpected result (e.g., synergism) is therefore *ipso facto* unpatentable. It is not clear what data (combinations and amounts) are presented in the instant written disclosure to show any unexpected results.

Accordingly, the instant claims, in the range of proportions where no unexpected results are observed, would have been obvious to one of ordinary skill having the above cited references before him. Therefore, it would have been obvious to one having ordinary skill in the

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art at the time the claimed invention was made to modify the nutritional supplements taught by the cited references combined.

No claims are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vera Afremova whose telephone number is (703) 308-9351. The examiner can normally be reached on Monday to Friday from 9:00 to 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn, can be reached on (703) 308-4743. The fax phone number for this Group is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Vera Afremova

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April 16, 2002.

Irene Marx
IRENE MARX
PRIMARY EXAMINER